

APPENDIX B

RECOMMENDED PLANTS – RAIN GARDENS

Recommended Plants for rain gardens and other vegetated storm water practices must be able to tolerate both wet and dry conditions. This list, while not exhaustive, includes many plants that will



tolerate conditions in rain gardens. The plants in this list do have different preferences for both moisture and light, as shown in the columns labeled ‘Moisture’ and ‘Sun’. Additionally, these plants are native to Missouri and thus contribute the added benefit of providing habitat and food for native pollinators and wildlife. Native plant species are preferred over non-native species, but some ornamental species may be used for a landscaping effect if they are not aggressive or invasive.

Nuisance Trees. Nuisance (invasive) trees cannot be used in rain gardens. The following trees will not be counted for planting: Box elder, Red maple, Silver maple, Freeman maple, Tree of Heaven, Mimosa, White birch, Paper mulberry, Russian olive, Autumn olive, all Ash species, Honey locust, Golden rain tree, Honeysuckle, White mulberry, Red mulberry, Empress tree, Austrian pine, Scotch pine, Poplars, Cottonwood, Lombardy poplar, Aspen, Edible-fruited cherries, peaches and plums, Crabapple species, Callery pear and all varieties of Bradford pear, Pin oak, Black locust, White willow, Weeping willow, Mountain ash, American elm, or Siberian elm.

PLANT SPACING

Figure 1. Triangular and Square Patterns. Typical plant spacing where x equals distance on center (O.C.) of plant species.

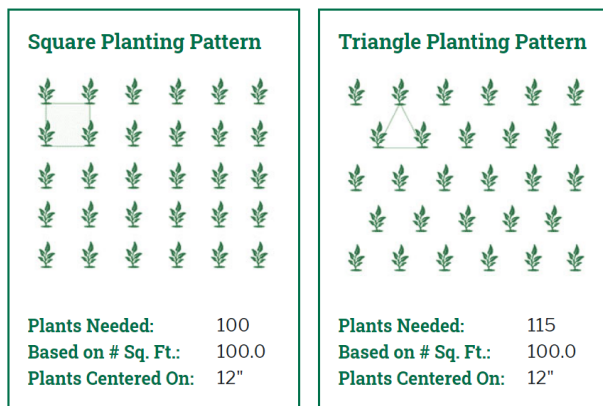


Table 1. is for use only when plants are spaced equidistant from each other as shown in Figure 1.

Table 1. Plant Spacing for Perennials, Grasses, Sedges and Shrubs ¹		
Spacing (X), inches (On Center)	Square Pattern Plants per 100 square feet	Triangular Pattern Plants per 100 square feet
4	900	1039
6	400	462
12	100	115
16	56	65
18	44	51
24	25	29
30	16	18
36	11	13
48	6	7
60	4	5
72	2	3

Plant Calculator: <https://www.midwestgroundcovers.com/index.cfm>
Note: Actual plants needed may vary slightly.



PLANT LISTS

Plant material size and grade to conform to “American Standards for Nursery Stock” American Association of Nurserymen, Inc. latest approved revision, ANSI Z-60-1. The plants listings below are not exhaustive of all plants that will thrive in a rain garden or other vegetated storm water practices, and are only meant as a guide.

- Perennials and grasses/sedges should be planted with plugs or 1 gallon containers or equivalent, seed is not allowed. While it is less expensive to plant areas with seed, it is much more difficult and it takes about three years for most seedlings to mature and flower.
- Shrubs should be planted with 3 gallon containers or equivalent.
- Trees should be minimum 2” caliper.
- Tree and shrub planting typical sections are included at end of this section.

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Amsonia illustris</i>	Shining Blue Star	24” o.c.	Wet-Moist	White/Blue	3-4’
<i>Asclepias incarnata</i>	Swamp / Marsh Milkweed	24” o.c.	Wet	Pink	3-4’
<i>Asclepias tuberosa</i>	Butterfly Milkweed	18” o.c.	Dry-moist	Orange	2’
<i>Asclepias verticillata</i>	Whorled Milkweed	18” o.c.	Moist	White	2.5’
<i>Asclepias vertis</i>	Green Milkweed	18” o.c.	Moist	Green	2’
<i>Aster novae-angliae</i>	New England Aster	24” o.c.	Moist-wet	Violet	3-4’
<i>Baptisia australis</i>	Blue False Indigo	24” o.c.	Moist-Dry	Blue	3-4’
<i>Baptisia bracteata</i>	Cream Wild Indigo	18” o.c.	Dry	Yellow	1-2’
<i>Baptisia sphaerocarpa</i>	Yellow Wild Indigo	24” o.c.	Dry-moist	Yellow	2-3’
<i>Blephilia ciliate</i>	Ohio Horsemint	18” o.c.	Dry-moist	Pink	1-2’
<i>Chelone glabra</i>	White Turtlehead	24” o.c.	Wet	White	2-4’
<i>Chelone obliqua</i>	Rose Turtlehead	18” o.c.	Wet	Rose	2-4’
<i>Chrysopsis camporum</i>	Golden Aster	18” o.c.	Dry	Yellow	2-3’
<i>Coreopsis lanceolata</i>	Lance-leaf Coreopsis	18” o.c.	Moist-dry	Yellow	6-8’
<i>Coreopsis palmata</i>	Finger Coreopsis	12” o.c.	Dry-moist	Yellow	2’
<i>Coreopsis tripteris</i>	Tall Coreopsis	24” o.c.	Dry-moist	Yellow	2-8’
<i>Echinacea pallida</i>	Pale purple Coneflower	18” o.c.	Dry	Purple	2-3’
<i>Echinacea paradoxa</i>	Yellow Coneflower	18” o.c.	Dry	Yellow	2-3’
<i>Echinacea purpurea</i>	Purple Coneflower	18” o.c.	Moist-dry	Purple	3-4’



Table 2 : Native Perennials– Full Sun

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Equisetum hyemale</i>	Horsetail	30" o.c.	Wet-moist	Green	2-4'
<i>Eryngium yuccifolium</i>	Rattlesnake Master	18" o.c.	Dry-moist	Green	4-5'
<i>Eupatorium coelestinum</i>	Mist Flower	18" o.c.	Moist	Purple	1-2'
<i>Eupatorium perfoliatum</i>	Boneset	24" o.c.	Wet	White	3-5'
<i>Eupatorium purpureum</i>	Joe-Pye Weed	24" o.c.	Wet-moist	Purple	3-6'
<i>Eurybia paludosa</i>	Southern Prairie Aster	18" o.c.	Dry-Moist	Purple	1-2'
<i>Gentiana andrewsii</i>	Bottle Gentian	18" o.c.	Moist-wet	Blue	1-2'
<i>Helenium autumnale</i>	Sneezeweed	24" o.c.	Moist-wet	Yellow	2-4'
<i>Helianthus salicifolius</i>	Willow-leaved Sunflower	24" o.c.	Dry-moist	Yellow	4-6'
<i>Heliopsis helianthoides</i>	Ox-eye Sunflower	24" o.c.	Wet-dry	Yellow	3-5'
<i>Heuchera americana</i>	American Alumroot	18" o.c.	Dry-moist	Cream	1'
<i>Heuchera parviflora</i>	Late-flowering Alumroot	18" o.c.	Dry-moist	White	1'
<i>Heuchera richardsonii</i>	Prairie Alumroot	18" o.c.	Dry-wet	Cream	1'
<i>Heuchera villosa</i>	Maple-leaf Alumroot	18" o.c.	Dry-moist	White	1'
<i>Hibiscus lasiocarpus</i>	Rose Mallow	24" o.c.	Wet	White/Pink	3-4'
<i>Iris brevicaulis</i>	Zig-zag Iris	12" o.c.	Wet-dry	Purple	0.5-1'
<i>Iris cristata</i>	Dwarf Crested Iris	12" o.c.	Dry	Violet	1'
<i>Iris fulva</i>	Copper Iris	12" o.c.	Wet	Red	2'
<i>Iris virginica</i>	Southern Blue Flag Iris	18" o.c.	Moist-Wet	Blue/Purple	2'
<i>Lespedeza virginica</i>	Slender Bush Clover	18" o.c.	Dry-moist	Pink	1-2'
<i>Liatris aspera</i>	Rough Blazingstar	18" o.c.	Moist-dry	Purple	2-5'
<i>Liatris pycnostachya</i>	Prairie Blazingstar	18" o.c.	Wet-Moist	Purple	1-4'
<i>Liatris scariosa</i>	Eastern Blazingstar	12" o.c.	Moist-dry	Purple	2-4'
<i>Liatris spicata</i>	Marsh Blazingstar	18" o.c.	Wet-dry	Purple	2-3'
<i>Lobelia cardinalis</i>	Cardinal Flower	18" o.c.	Wet-moist	Red	2-4'
<i>Lobelia siphilitica</i>	Blue Lobelia	12" o.c.	Wet-moist	Purple	2-3'
<i>Mimulus ringens</i>	Allegheny Monkey Flower	18" o.c.	Moist-wet	Lavender	1-2'
<i>Monarda didyma</i>	Bee Balm	24" o.c.	Wet-moist	Red	3'



Table 2 : Native Perennials– Full Sun

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Monarda fistulosa</i>	Wild Bergamot	18" o.c.	Moist	Purple	1-3'
<i>Packera obovata</i>	Golden Groundsel (Squaw Weed)	12" o.c.	Wet-Moist	Yellow	1'
<i>Parthenium integrifolium</i>	Wild Quinine	18" o.c.	Dry-moist	White	2-4'
<i>Penstemon cobaea</i>	Purple Beard Tongue	12" o.c.	Moist-Dry	Purple	1-2'
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	18" o.c.	Moist-Dry	White	2.5-4'
<i>Phlox maculata</i>	Meadow Phlox	12" o.c.	Wet-Moist	Pink/Rose	2-3'
<i>Phlox paniculata</i>	Garden Phlox	24" o.c.	Wet-Moist	Pink/Rose	3-4'
<i>Pycnanthemum pilosum</i>	Hairy Mountain Mint	18" o.c.	Moist-Dry	White	2-4'
<i>Pycnanthemum tenuifolium</i>	Slender mountain mint	18" o.c.	Moist	White	1.5-2.5'
<i>Ratibida pinnata</i>	Yellow/Grey Coneflower	18" o.c.	Dry-Moist	Yellow	3-5'
<i>Rudbeckia fulgida</i>	Orange Coneflower	24" o.c.	Wet-Moist	Yellow	1.5-2.5'
<i>Rudbeckia hirta</i>	Black-eyed Susan	18" o.c.	Moist-dry	Yellow	3'
<i>Rudbeckia subtomentosa</i>	Sweet Coneflower	24" o.c.	Wet-Dry	Yellow	4-6'
<i>Salvia azurea</i>	Blue Sage	24" o.c.	Moist-Dry	Blue	3-4'
<i>Sagittaria latifolia</i>	Arrowleaf	30" o.c.	Wet	White	1-4'
<i>Scutellaria incana</i>	Downy Skullcap	18" o.c.	Dry-moist	Blue	2-3'
<i>Senna (cassia) marilandica</i>	Wild Senna	24" o.c.	Moist-dry	Yellow	3-5'
<i>Silene regia</i>	Royal Catchfly	12" o.c.	Moist-Dry	Red	2-3'
<i>Silphium perfoliatum</i>	Cup Plant	36" o.c.	Wet-dry	Yellow	7-10'
<i>Solidago nemoralis</i>	Old Field Goldenrod	18" o.c.	Dry-moist	Yellow	4-6'
<i>Solidago rigida</i>	Stiff Goldenrod	12" o.c.	Moist-dry	Yellow	3-4'
<i>Solidago rugosa</i>	Rough-Leaved Goldenrod	18" o.c.	Dry-moist	Yellow	2-3'
<i>Solidago speciosa</i>	Showy Goldenrod	18" o.c.	Moist-dry	Yellow	3-4'
<i>Symphyotrichum laeve</i>	Smooth Aster	18" o.c.	Wet-dry	Blue/ Purple	2-3'
<i>Symphyotrichum novae-angliae</i>	New England Aster	24" o.c.	Wet-moist	Purple	2.5-5'
<i>Symphyotrichum oblongifolium</i>	Aromatic Aster	24"	Dry-moist	Purple	1-3'
<i>Symphyotrichum oolentangiense (azureus)</i>	Sky Blue Aster	18" o.c.	Moist-dry	Blue	2-3'



Table 2 : Native Perennials– Full Sun

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Tephrosia virginiana</i>	Goatsbeard	12" o.c.	Dry-moist	Green	1-2'
<i>Verbesina helianthoides</i>	Yellow Wingstem	18" o.c.	Dry-moist	Yellow	2-3'
<i>Veronacastrum virginicum</i>	Culver's Root	24" o.c.	Dry	White	3-6'
<i>Zizia aptera</i>	Golden Alexander	12" o.c.	Wet-moist	Yellow	1-1.5'

Table 3 : Native Perennials– Shade

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Asarum canadense</i>	Wild Ginger	12" o.c.	Moist	Green	4"
<i>Cimifuga racemosa</i>	Black Cohosh	24" o.c.	Moist	White	5-7'
<i>Claytonia virginica</i>	Spring Beauty	4" o.c.	Wet-dry	White	5-10"
<i>Coreopsis palmata</i>	Prairie Coreopsis	12" o.c.	Moist-dry	Yellow	1.5-2.5'
<i>Erythronium americanum</i>	Yellow Trout Lily	4" o.c.	Moist	Yellow	6-12"
<i>Isopyrum biternatum</i>	False Rue Anemone	6" o.c.	Moist-wet	White	5-8"
<i>Mertensia virginica</i>	Virginia Bluebells	12" o.c.	Moist	Blue/Purple /White	1-2'
<i>Packera aurea</i>	Golden Ragwort	12" o.c.	Moist	Yellow	0.5-1'
<i>Packera obovata</i>	Golden Groundsel	12" o.c.	Moist	Yellow	1'
<i>Phlox divaricate</i>	Wild Sweet William	12" o.c.	Moist-dry	Purple	1'
<i>Polemonium reptans</i>	Jacob's Ladder	12" o.c.	Moist	Blue	1'
<i>Polygonatum biflorum</i>	Solomon's Seal	12" o.c.	Moist-dry	White	2-4'
<i>Spigelia marilandica</i>	Indian Pink	12" o.c.	Moist-dry	Green	1.5-2.5'
<i>Stylophorum diphyllum</i>	Celandine Poppy	18" o.c.	Moist	Yellow	1-1.5'

Table 4 : Native Grasses and Sedges

Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Andropogon gerardii</i>	Big Bluestem	24" o.c.	Moist-Dry	Green	5-9'
<i>Andropogon virginicus</i>	Broomsedge	18" o.c.	Dry	Green	1-2'
<i>Andropogon ternarius</i>	Splitbeard Bluestem	18" o.c.	Dry	Green	1-2'
<i>Bouteloua curtipendula</i>	Sideoats Grama	12" o.c.	Dry-moist	Yellow	1-2'



Table 4 : Native Grasses and Sedges					
Latin Name	Common Name	Spacing	Moisture	Color	Height
<i>Bouteloua gracilis</i>	Blue Gamma Grass	18" o.c.	Moist-Dry	Green/Yellow	1-2'
<i>Carex albicans</i>	Oak Sedge	18" o.c.	Moist	Green	1'
<i>Carex annectans</i>	Yellow Fruited Sedge	18" o.c.	Wet-moist	Green	2-3'
<i>Carex crinite</i>	Fringed Sedge	18" o.c.	Wet-moist	Green	2-3'
<i>Carex grayii</i>	Globe Sedge	18" o.c.	Moist-wet	Green	1-1.5'
<i>Carex eburnea</i>	Bristle-leaf Sedge	12" o.c.	Moist	Green	1'
<i>Carex hirsutella</i>	Fuzzy Wuzzy Sedge	12" o.c.	Dry-moist	Green	1'
<i>Carex pennsylvanica</i>	Pennsylvania Sedge	18" o.c.	Moist	Green	1'
<i>Carex muskingumensis</i>	Palm Sedge	18" o.c.	Moist-wet	Green	2-3'
<i>Carex praegracilis</i>	Tollway Sedge	24" o.c.	Dry-Wet	Green	2'
<i>Carex shortiana</i>	Short's Sedge	18" o.c.	Dry-wet	Green	1-2'
<i>Carex stricta</i>	Tussock Sedge	18" o.c.	Wet	Green	1-1.5'
<i>Carex vulpinoidea</i>	Fox Sedge	18" o.c.	Moist-wet	Green	2-3'
<i>Chasmanthium latifolium</i>	Northern Sea Oats / River Oats	24" o.c.	Wet-moist	Green	2-2.5'
<i>Diarrhena obovate</i>	American Beakgrain	16" o.c.	Wet-dry	Green	1.5-2.5'
<i>Elymus canadensis</i>	Canada Wild Rye	24" o.c.	Dry	Green	3-5'
<i>Juncus biflorus</i>	Bog rush	12" o.c.	Moist-wet	Green	2'
<i>Juncus effuses</i>	Soft Rush	18" o.c.	Moist-wet	Green	2-3'
<i>Juncus tenuis</i>	Path Rush	12" o.c.	Wet-moist	Green	6-12"
<i>Panicum virgatum</i>	Switch Grass	24" o.c.	Moist-dry	Green	3-6'
<i>Scirpus atrovirens</i>	Great Green Bullrush	18" o.c.	Wet	Green	2-3'
<i>Scirpus cyperinus</i>	Wool Grass	18" o.c.	Wet	Green	3-4'
<i>Schizachyrium scoparium</i>	Little Bluestem	12" o.c.	Moist-dry	Green/Blue	2-3'
<i>Sorghastrum nutans</i>	Indian Grass	24" o.c.	Moist-dry	Green/Blue	3-6'
<i>Spartina pectinate</i>	Prairie Cordgrass	30" o.c.	Moist-wet	Green	4-5'
<i>Sporobolus heterolepis</i>	Prairie Dropseed	24" o.c.	Moist-dry	Green	1.5-2.5'
<i>Tripsacum dactyloides</i>	Eastern Gama Grass	4' o.c.	Wet	Green	4-8'



Table 5 : Native Medium Shrubs							
Latin Name	Common Name	Spacing	Sun	Moisture	Flower Color	Height	Notes
<i>Aronia melanocarpa</i>	Black Chokeberry	5-9'		Dry-Wet	White	5-9'	Food for Birds and Small Animals
<i>Callicarpa Americana</i>	American Beautyberry	3'	Full Sun/ Avg Shade	Dry-moist	Purple	4-5'	Ornamental Fresh-cut Flowers Berries attract songbirds
<i>Ceanothus americanus</i>	New Jersey Tea	2'	Full Sun/ Avg Shade	Dry-moist	White	2-4'	Edible leaves can be brewed into tea when dried. Food for Birds and Small Animals
<i>Cephalanthus occidentalis</i>	Buttonbush	6'	Full Sun/ Avg Shade	Wet	White	6-10'	Fragrant flowers attract butterflies and other pollinators
<i>Dirca palustris</i>	Leatherwood	3'	Shade	Wet-moist	-	4-7'	Food for birds
<i>Euonymus americanus</i>	Strawberry Bush	5'	Shade	Wet-moist	Red	6-8'	Food for birds Attracts songbirds and butterflies
<i>Hydrangea arborescent</i>	Wild Hydrangea	4'	Full Sun/ Shade	Moist-dry	White	4-5'	Fresh cut flowers Attracts butterflies and other pollinators
<i>Hypericum prolificum</i>	Shrubby St. Johns Wort	2'	Full Sun/ Avg Shade	Dry-moist	Yellow	3-5'	Fresh cut flowers Attracts butterflies and other pollinators
<i>Ilex verticillate</i>	Winterberry Holly	4'	Full Sun/ Avg Shade	Wed-dry	Green	6-10'	Ornamental Food for birds and small animals
<i>Lindera benzoin</i>	Spicebush	6'	Full Sun/ Avg Shade	Wet-moist	Yellow	6-12'	Attracts butterflies and other pollinators
<i>Physocarpus opulifolius</i>	Ninebark	6'	Full Sun	Wet-moist	White	5-10'	Attracts butterflies and other pollinators
<i>Rhus aromatica</i>	Fragrant Sumac	6'	Full Sun/ Avg Shade	Dry-moist	Red	2-6'	Food for birds and small animals
<i>Ribes odoratum</i>	Golden Currant	5'	Full Sun/ Avg Shade	Dry-moist	Yellow	4-6'	Edible fruit Attracts butterflies and other pollinators
<i>Sambucus Canadensis</i>	Elderberry	5'	Full Sun/ Avg Shade	Wet-moist	White	5-12'	Edible fruit Attracts butterflies and other pollinators



Table 6 : Native Large Shrubs							
Latin Name	Common Name	Spacing	Sun	Moisture	Flower Color	Height	Notes
<i>Amelanchier arborea</i>	Serviceberry	10'		Dry-moist	White	15-25'	Large shrub can be pruned into small tree. Attracts songbirds Edible fruit
<i>Cornus racemose</i>	Gray Dogwood	10'	Full Sun/ Shade	Dry-moist	Red/ White	10-15'	Attracts songbirds
<i>Corylus Americana</i>	American Hazelnut	8'	Full Sun/ Avg Shade	Dry-moist	Yellow	8-12'	Edible nuts
<i>Euonymus atropurpureus</i>	Wahoo	8'	Full Sun/ Avg Shade	Dry-moist	Purple	12-20'	Food for birds
<i>Hamamelis virginiana</i>	Witch Hazel	15'	Full Sun/ Shade	Dry-moist	Yellow	15-20'	Food for birds Attracts butterflies and other pollinators
<i>Ilex decidua</i>	Deciduous Holly	5'	Full Sun/ Avg Shade	Dry-moist	Red/ White	10-15'	Ornamental Food for birds and small animals
<i>Prunus virginiana</i>	Chokeberry	15'	Shade/ Avg Shade	Wet-dry	White	20-30'	Edible Fruit Attracts butterflies and other pollinators
<i>Viburnum prunifolium</i>	Black Haw Viburnum	8'	Full Sun	Wet-dry	White	12-15'	Food for birds and small animals Attracts butterflies and other pollinators

Table 7 : Native Small-Medium Trees							
Latin Name	Common Name	Spread	Sun	Moisture	Flower Color	Height	Notes
<i>Acer saccharum</i>	Sugar Maple	50-60'	Full Sun/ Avg Shade	Dry		40-75'	
<i>Asimina trilobal</i>	Paw Paw	15-20'	Full Sun/ Avg Shade	Moist-wet	Purple	15-30'	Edible fruit Plant is larval food of Zebra Swallowtail butterfly
<i>Carpinus caroliniana</i>	American Hornbeam	20-50'	Full Sun/ Shade	Moist-wet		20-40'	
<i>Cercis canadensis</i>	Eastern Redbud	25-35'	Full Sun/ Avg Shade	Moist-dry	Pink/ Rose	20-30'	Ornamental



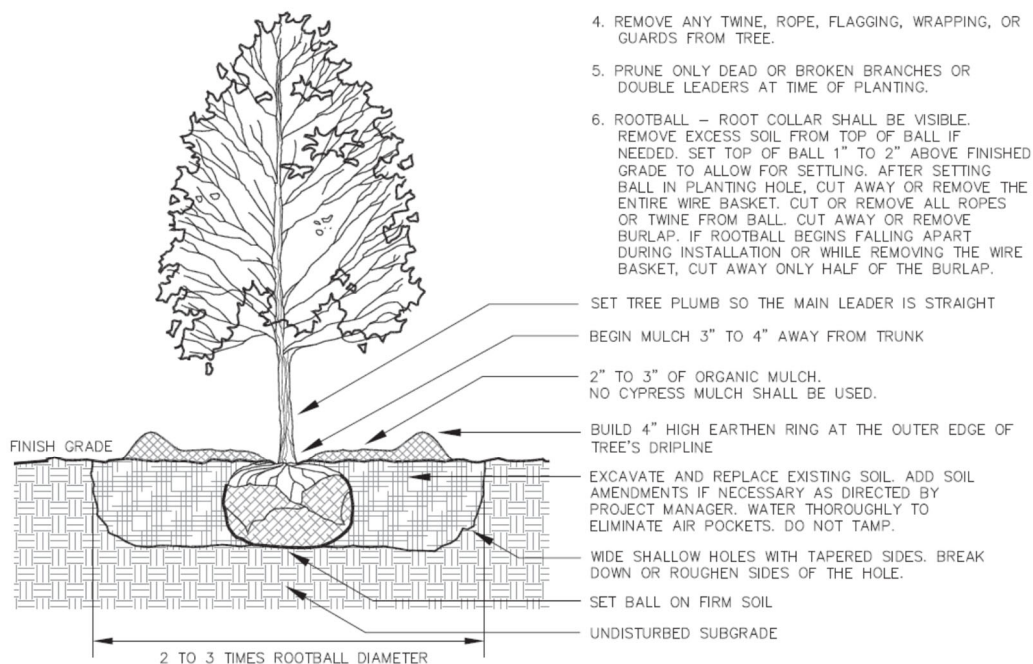
Table 7 : Native Small-Medium Trees							
Latin Name	Common Name	Spread	Sun	Moisture	Flower Color	Height	Notes
<i>Chionanthus virginicus</i>	Fringetree	5-8'	Full Sun/ Avg Shade	Dry-moist	White	8-10'	Plants of Merit winner by Missouri Botanical Garden. Shimmering, white frothy flowers Can be grown as a large shrub.
<i>Cornus drummondii</i>	Roughleaf Dogwood	6-12'	Full Sun/ Avg Shade	Dry-moist	White	8-15'	Can be grown as a large shrub Food for birds and small animals
<i>Cornus florida</i>	Flowering Dogwood	15-30'	Full Sun/ Avg Shade	Moist	White	15-30'	Missouri State Tree Ornamental
<i>Crataegus mollis</i>	Downy Hawthorn	20-30'	Full Sun/ Avg Shade	Dry-moist	White	20-30'	Ornamental Food for birds and small animals
<i>Crataegus viridis</i>	Green Hawthorn	20-35'	Full Sun	Wet-Moist	White	20-35'	Ornamental Food for birds and small animals

Table 8 : Native Medium-Large Trees							
Latin Name	Common Name	Spread	Sun	Moisture	Flower Color	Height	Notes
<i>Acer saccharum</i>	Sugar Maple	50-60'	Full Sun/ Avg Shade	Dry		40-75'	
<i>Asimina trilobal</i>	Paw Paw	15-20'	Full Sun/ Avg Shade	Moist-wet	Purple	15-30'	Edible fruit Plant is larval food of Zebra Swallowtail butterfly
<i>Betula nigra</i>	River Birch	40-60'	Full Sun	Dry-wet		40-70'	Peeling bark
<i>Carya ovata</i>	Shagbark Hickory	40-60'	Full Sun/ Shade	Dry-moist		60-80'	Edible nuts Bark peels off in thin sections, curling at the ends while staying attached in the middle
<i>Celtis occidentalis</i>	Hackberry	40-60'	Full Sun	Dry-wet		40-60'	Use as a shade tree in large areas
<i>Diospyros virginiana</i>	Persimmon	20-35'	Full Sun/ Avg Shade	Moist		35-60'	Edible fruit

Table 8 : Native Medium-Large Trees

Latin Name	Common Name	Spread	Sun	Moisture	Flower Color	Height	Notes
<i>Platanus occidentalis</i>	Sycamore	75-100'	Full Sun	Wet-moist		75-100'	Shade Tree
<i>Quercus alba</i>	White Oak	50-90'	Full Sun	Dry-moist		50-80'	Shade tree
<i>Quercus bicolor</i>	Swamp White Oak	50-70'	Full Sun/ Avg Shade	Wet-dry		50-80'	Shade tree
<i>Quercus macrocarpa</i>	Bur Oak	70-80'	Full Sun/ Avg Shade	Wet-dry		70-80'	Shade tree
<i>Taxodium distichum</i>	Bald Cypress	20-30'	Full Sun/ Avg Shade	Wet-moist		50-70'	Tolerates a wide range of conditions ranging from relatively dry soil to wet soil and standing water

EXAMPLE OF TREE PLANTING DETAIL:



- NOTES:
1. TREES SHALL BE 2" CALIPER MINIMUM.
 2. THE HOLE FOR THE TREE SHALL BE EXCAVATED 2-3 TIMES THE SIZE OF THE ROOT BALL.
 3. STAKE ONLY IF NECESSARY AND AS DIRECTED BY THE PROJECT MANAGER.
 4. REMOVE ANY TWINE, ROPE, FLAGGING, WRAPPING, OR GUARDS FROM TREE.
 5. PRUNE ONLY DEAD OR BROKEN BRANCHES OR DOUBLE LEADERS AT TIME OF PLANTING.
 6. ROOTBALL – ROOT COLLAR SHALL BE VISIBLE. REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. SET TOP OF BALL 1" TO 2" ABOVE FINISHED GRADE TO ALLOW FOR SETTLING. AFTER SETTING BALL IN PLANTING HOLE, CUT AWAY OR REMOVE THE ENTIRE WIRE BASKET. CUT AWAY OR REMOVE ALL ROPES OR TWINE FROM BALL. CUT AWAY OR REMOVE BURLAP. IF ROOTBALL BEGINS FALLING APART DURING INSTALLATION OR WHILE REMOVING THE WIRE BASKET, CUT AWAY ONLY HALF OF THE BURLAP.

○ TREE PLANTING DETAIL
NOT TO SCALE

RELATED LINKS AND RESOURCES

¹ <https://www.missouribotanicalgarden.org/Portals/0/Shaw%20Nature%20Reserve/PDFs/horticulture/NLM%20Ch4.pdf>

For an up-to-date list of native plant sources:

- Grow Native! www.grownative.org, by the Missouri Prairie Foundation

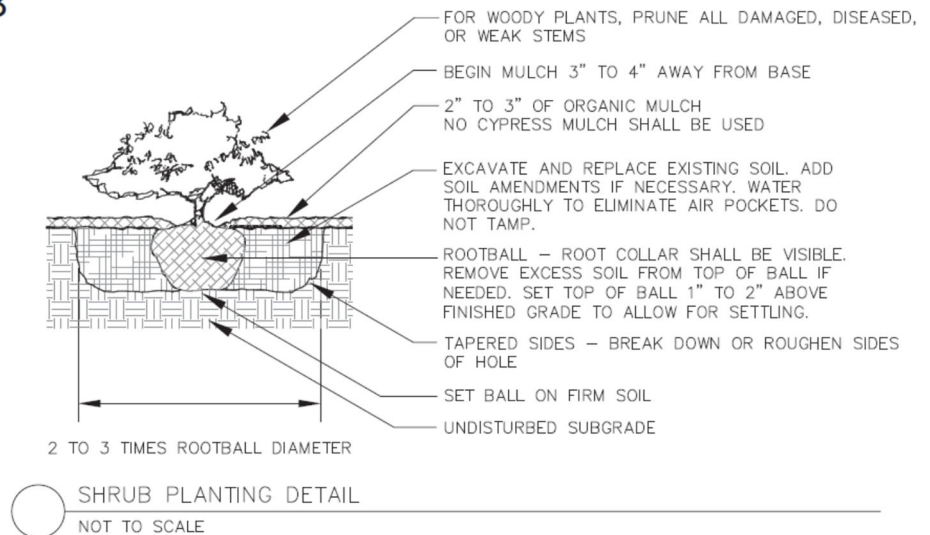
Additional Web Resources:

- Missouri Department of Conservation, mdc.mo.gov/trees-plants
- Missouri Prairie Foundation, www.moprairie.org
- Shaw Nature Reserve, www.shawnature.org
- Show Me Rain Gardens, www.showmeraingardens.org
- Ten Thousand Rain Gardens, www.rainkc.com
- The Green Center, www.thegreencenter.org
- Missouri Botanical Garden Plant Finder, www.missouribotanicalgarden.org

Publications:

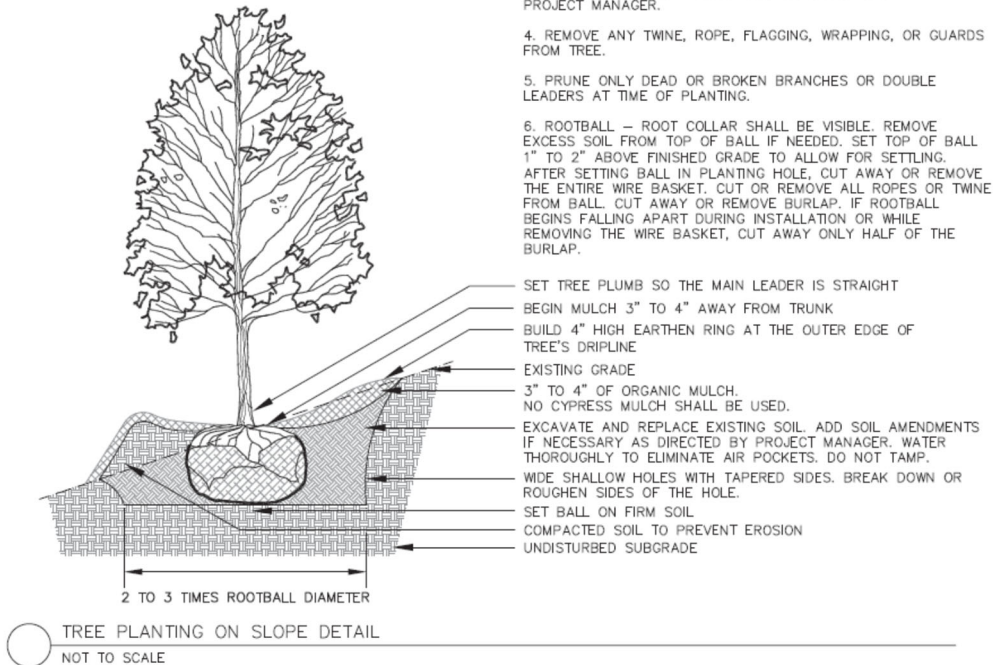
- Metropolitan St. Louis Sewer District (2014). *Landscape Guide for Stormwater Best Management Practice Design*, St. Louis, MO. www.stlmsd.com/sites/default/files/engineering/442680.PDF
- Shaw Nature Reserve, a division of the Missouri Botanical Garden (2011). *A Guide to Native Landscaping*, Gray Summit, MO.
- Missouri Department of Natural Resources (2012). *Missouri Guide to Green Infrastructure*, Jefferson City, MO. dnr.mo.gov/env/wpp/stormwater/mo-gi-guide.htm

EXAMPLE OF SHRUB PLANTING DETAIL:





EXAMPLE OF SLOPE TREE PLANTING DETAIL:



- NOTES:
1. TREES SHALL BE 2" CALIPER MINIMUM.
 2. THE HOLE FOR THE TREE SHALL BE EXCAVATED 2-3 TIMES THE SIZE OF THE ROOT BALL.
 3. STAKE ONLY IF NECESSARY AND AS DIRECTED BY THE PROJECT MANAGER.
 4. REMOVE ANY TWINE, ROPE, FLAGGING, WRAPPING, OR GUARDS FROM TREE.
 5. PRUNE ONLY DEAD OR BROKEN BRANCHES OR DOUBLE LEADERS AT TIME OF PLANTING.
 6. ROOTBALL – ROOT COLLAR SHALL BE VISIBLE. REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. SET TOP OF BALL 1" TO 2" ABOVE FINISHED GRADE TO ALLOW FOR SETTLING. AFTER SETTING BALL IN PLANTING HOLE, CUT AWAY OR REMOVE THE ENTIRE WIRE BASKET. CUT OR REMOVE ALL ROPES OR REMOVE FROM BALL. CUT AWAY OR REMOVE BURLAP. IF ROOTBALL BEGINS FALLING APART DURING INSTALLATION OR WHILE REMOVING THE WIRE BASKET, CUT AWAY ONLY HALF OF THE BURLAP.